

Applicants: EDLIS, Ofir et al.
Serial No.: 09/778,818

Attorney Docket No.: P-3309-US
Assignee: Intel Corporation

REMARKS

Applicants have carefully studied the Office Action. This paper is intended to be fully responsive to all points of rejection and objection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

Status of the Claims

Claims 1-8 and 10-19 are pending in this application. Claim 1 has been amended.

Finality of Action

Applicants are filing concurrently herewith a Request for Continued Examination under 37 CFR 1.114, including the required fee. Applicants respectfully request that the Examiner reconsider the pending claims in view of the above amendments and following remarks.

Interview Summary

Applicants would like to thank the Examiner for the courtesy of two telephone interviews with Applicants' representatives on June 20 and 23, 2005.

During the telephone interviews, Applicants' representatives and the Examiner discussed the pending claims in view of Challa et al., United States Patent Number 5,392,287 ("Challa"). Applicants' representatives pointed out, *inter alia*, that Challa does not disclose at least the feature of background processing of a portion of the received signal during a time period in which the Radio Frequency module is de-activated. Although an agreement was not reached, Applicants' representatives indicated that Applicants intend to file a response presenting the arguments that follow.

Voluntary Amendment of Claims

Applicants have amended claim 1 to clarify what the Applicants regard as the invention.

Applicants: EDLIS, Ofir et al.
Serial No.: 09/778,818

Attorney Docket No.: P-3309-US
Assignee: Intel Corporation

No new matter has been added by this amendment.

Specifically, claim 1 has been amended to clarify that background processing is performed on at least a portion of the received signals at a second, faster clock rate during at least part of a second time period in which the Radio Frequency module is de-activated. This language is also consistent with the language of independent claims 10 and 15, which are discussed below.

Applicants respectfully submit that the amendment of claim 1 is not being made for reasons of patentability and does not narrow the scope of claim 1. Therefore, claim 1 is not subject to the complete bar against the use of the Doctrine of Equivalents as outlined in *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*

Claim Rejections under 35 USC 102(e)

The Examiner rejected claims 1, 3-8, 10, 11, 13, 15, 16 and 18 under 35 USC 102(e) as being anticipated by Challa.

Specifically, the Examiner contended that Challa describes performing processing operations at a first clock rate during at least part of a first time period in which signals are received and stored by a Radio Frequency module, and performing background processing operations at a second, faster clock rate during a second time period in which said Radio Frequency module is de-activated.

Applicants respectfully disagree.

As is well established, in order for a claim to be anticipated by the prior art, each and every element and feature of the claim must be included in a single prior art document.

Each of independent claims 1, 10 and 15 recites, in paraphrase, performing background processing of at least a portion of the received signals at a second, faster clock rate during at least a portion of a second time period in which the Radio Frequency module is de-activated. Challa does not disclose, teach or suggest at least this feature of independent claims 1, 10 and 15.

Specifically, Applicants respectfully submit that Challa does not disclose or suggest at least three features recited, in paraphrase, in independent claims 1, 10 and 15.

First, Challa does not disclose or suggest at least that the background processing of the received signal is performed “during at least a portion of a second time period in which the Radio Frequency module is de-activated”. Challa describes only that “the mobile station attempts to detect a unique word within a received paging signal, such as a message preamble” (Challa, column 2, lines 37-40), but fails to disclose or suggest that its “unique word detection” is performed while the Radio Frequency module is de-activated. Moreover, the above quotation from Challa indicates that Challa performs its “unique word detection” during reception, and not while the Radio Frequency module is de-activated. It is respectfully submitted that a straightforward reading of Challa would lead a person skilled in the art to assume that the unique word is detected during reception of the signal, not in the background, e.g., because no mechanism is disclosed in Challa for delaying the detection until after the reception module is de-activated.

Second, Challa does not disclose or suggest at least that the background processing of the received signal is performed “at a second, faster clock rate”. Applicants further note that Challa actually teaches away from the claimed invention. Challa describes a system to “employ an alternate low frequency, low power clock during the sleep period to further reduce power consumption” (Challa, column 1, lines 56-58), and “using a low-frequency clock signal to track time during a sleep period” (Challa, column 2, lines 18-19). Therefore, Challa clearly describes using a lower frequency, and not a faster clock rate, during the sleep period, thereby being contrary to and teaching away from the feature of performing the background processing operations at a faster clock rate while the Radio Frequency module is de-activated, as required by independent claims 1, 10 and 15.

Third, Challa does not disclose or suggest at least “performing background processing of a received signal”. Challa describes only that “the mobile station attempts to detect a unique word within a received paging signal, such as a message preamble” (Challa, column 2, lines 37-40). The detection of a unique word in a preamble, as described by Challa, is a detection operation of a pre-defined pattern, and does not constitute “processing” of a signal, within the common definition of the term. It is well known in the art that detection of a unique word in a preamble includes a simple scanning

Applicants: EDLIS, Ofir et al.
Serial No.: 09/778,818

Attorney Docket No.: P-3309-US
Assignee: Intel Corporation

of a preamble in search for a repeating pre-defined pattern ("unique word"), whereas signal processing includes other processing operations, for example, decoding data.

In view of the above, it is respectfully asserted that Challa does not anticipate any of amended independent claims 1, 10 and 15.

Applicants further submit that the above-mentioned features of claims 1, 10 and 15 would not have been obvious at the time the invention was made to a person having ordinary skill in the art. For example, operating a processor at a faster clock rate may result in increased power consumption. In contrast, Challa includes numerous phrases stating objectives to decrease power consumption; for example, Challa describes "slotted paging to allow mobile stations to conserve battery power" (column 1, lines 18-19); "a mobile station reduces power consumption by disconnecting power from selected internal components during a sleep period" (column 1, lines 40-42); "employ an alternate low frequency, low power clock during the sleep period to further reduce power consumption" (column 1, lines 56-58); "to permit maximum power savings during the sleep period" (column 3, lines 44-45); and "to thereby gain the maximum amount of power savings during the sleep period" (column 8, lines 60-62).

Therefore, although the Examiner has not made such a rejection, Applicants respectfully submit that amended independent claims 1, 10 and 15 are patentable over Challa and/or any other prior art references on record, and any combinations of those references, including United States Patent Number 5,392,287 to Tiedemann et al. ("Tiedemann") and/or United States Patent Number 6,608,858 to Sih ("Sih").

Claims 3-8, claims 11 and 13, and claims 16 and 18, are dependent from amended independent claims 1, 10 and 15, respectively, and include all the features of the independent claims as well as additional distinguishing features. Therefore, it is respectfully submitted that the novelty and patentability of claims 3-8, claims 11 and 13, and claims 16 and 18, follow directly from the novelty and patentability of amended independent claims 1, 10 and 15, respectively.

In view of the above, Applicants respectfully request that the rejection of claims 1, 3-8, 10, 11, 13, 15, 16 and 18 under 35 USC 102(e) be withdrawn.

Applicants: EDLIS, Ofir et al.
Serial No.: 09/778,818

Attorney Docket No.: P-3309-US
Assignee: Intel Corporation

Claim Rejections Under 35 USC §103(a)

The Examiner rejected claim 2 under 35 USC §103(a) as being unpatentable over Challa in view of Tiedemann.

Specifically, the Examiner stated that Challa does not teach background processing of spread spectrum signals, but contended that Tiedemann describes a background process operation (scheduled communication) which uses spread spectrum communication signals.

According to M.P.E.P. §2142, in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

Without conceding the appropriateness of the combination, Applicants respectfully submit that the combination of Challa and Tiedemann does not meet the requirements of an obviousness rejection, in that the combination at least fails to teach or suggest all the elements of the claimed invention.

Claim 2, is dependent from independent claim 1. As discussed above, claim 1 recites, in paraphrase, performing background processing of at least a portion of the received signals at a second, faster clock rate during at least a portion of a second time period in which the Radio Frequency module is de-activated. Challa and/or Tiedemann, alone or in combination, do not disclose, teach or suggest at least this feature of independent claim 1. Therefore, Challa and/or Tiedemann, alone or in combination, do not render independent claim 1 obvious.

Claim 2 is dependent from independent claim 1, and includes all the features of independent claim 1 as well as additional distinguishing features. Therefore, it is

Applicants: EDLIS, Ofir et al.
Serial No.: 09/778,818

Attorney Docket No.: P-3309-US
Assignee: Intel Corporation

respectfully submitted that the novelty and patentability of claim 2 follow directly from the novelty and patentability of independent claim 1.

The Examiner rejected claims 12 and 17 under 35 USC §103(a) as being unpatentable over Challa in view of Sih.

Specifically, the Examiner stated that Challa does not teach a rake receiver and search engine, but contended that Sih describes a rake receiver and search engine.

Without conceding the appropriateness of the combination, Applicants respectfully submit that the combination of Challa and Sih does not meet the requirements of an obviousness rejection, in that the combination at least fails to teach or suggest all the elements of the claimed invention.

Claims 12 and 17 are dependent from independent claims 10 and 15, respectively. As discussed above, each of claims 10 and 15 recites, in paraphrase, performing background processing of at least a portion of the received signals at a second, faster clock rate during at least a portion of a second time period in which the Radio Frequency module is de-activated. Challa and/or Sih, alone or in combination, do not disclose, teach or suggest at least this feature of independent claims 10 and 15. Therefore, Challa and/or Sih, alone or in combination, do not render independent claim 1 obvious.

Claims 12 and 17 are dependent from independent claims 10 and 15, respectively, and include all the features of these independent claims as well as additional distinguishing features. Therefore, it is respectfully submitted that the novelty and patentability of claims 12 and 17 follow directly from the novelty and patentability of independent claims 10 and 15, respectively.

In view of the above, Applicants respectfully request that the rejection of claims 2, 12 and 17 under 35 USC §103(a) be withdrawn.

Conclusion

In view of the foregoing amendment and remarks, Applicants respectfully submit that claims 1-8 and 10-19 are deemed to be allowable. Their favorable reconsideration and allowance are respectfully requested.

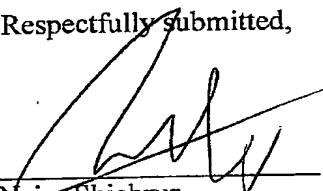
Applicants: EDLIS, Ofir et al.
Serial No.: 09/778,818

Attorney Docket No.: P-3309-US
Assignee: Intel Corporation

Should the Examiner have any question or comment as to the form, content or entry of this paper, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

No fees are believed to be due. However, if any fees are due, please charge any such fees to deposit account No. 50-3355.

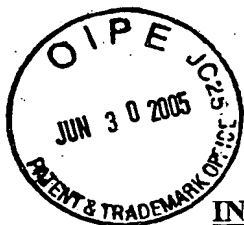
Respectfully submitted,



Naim Shichrur
Agent for Applicants
Registration No. 56,248

Dated: June 30, 2005

Pearl Cohen Zedek Latzer, LLP
10 Rockefeller Plaza, Suite 1001
New York, New York 10020
Tel: (212) 632-3480
Fax: (212) 632-3489



Attorney Docket No.: P-3309-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): EDLIS, Ofir et al.

Examiner: GHULAMALI, Q.

Serial No.: 09/778,818

Group Art Unit: 2637

Filed: February 8, 2001

Title: BACKGROUND PROCESSING AND SEARCHING FOR A
COMMUNICATION CHANNEL

Mail Stop Amendment
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, this Information Disclosure Statement includes Form PTO-1449:

1. ☐ listing documents including patents, publications and other information for consideration by the Examiner, however, since the subject application was filed after June 30, 2003, copies of United States patents, and/or United States patent applications, and/or United States patent application publications are not included in this information disclosure statement; and/or
2. ☐ listing documents including patents, publications and other information that have been previously cited or submitted to the Patent Office in prior application U.S. Serial No. _____, filed _____ which is properly identified and relied on for an earlier effective filing date under 35 U.S.C. 120 for consideration by the Examiner; however, in accordance with 37 C.F.R. 1.98(d), copies of such documents are not included in this information disclosure statement; and/or
3. ☒ listing documents including patents, publications, and other information for consideration by the Examiner, copies of which are included with this information disclosure statement;
4. ☐ listing other information for the Examiner's consideration which was cited in a communication from a foreign patent office in a counterpart foreign application, a copy of which is included with this information disclosure statement.

APPLICANTS: EDLIS, Ofir et al.
SERIAL NO.: 09/778,818
FILED: February 8, 2001
Page 2

The information herein cited is only in fulfillment of Applicant(s) duty of candor in disclosing all information brought to Applicant(s) attention. This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art". If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicant(s) reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicant(s) further reserve(s) the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

In accordance with MPEP Sections 609 and 707.05(b), it is requested that each and every document cited (including any cited in applicant's specification which is not repeated on the attached Form PTO-1449) be given thorough consideration and that it be cited of record in the prosecution history of the present application by initialing on Form PTO-1449. Such initialing is requested even if the Examiner does not consider it to be prior art for any reason, or even if the Examiner does not believe that the guidelines for citation have been fully complied with. This is requested so that each document becomes listed on the face of the patent issuing on the present application and is evidence that the Examiner has considered the document.

This Information Disclosure Statement is being filed:

I) ☒ Within three (3) months of filing the subject Application or entry of the subject Application into the national stage or before mailing of the first Office Action on the merits of the subject Application or a request for continued examination thereof, whichever event occurs last pursuant to of 37 C.F.R §1.97 (b); or

II) ☐ After the period specified in (I) but before the mailing date of either a final Official Action under 37 C.F.R §1.113 or a notice of allowance under 37 C.F.R §1.311 whichever occurs first and;

1. ☐ the undersigned hereby states that each item of information listed on the Form PTO-1449 was either (i) cited in a communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to the filing of this Information Disclosure Statement or (ii) not cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, not known to any individual designated in §1.56(c) more than three (3) months prior to the filing of this information disclosure statement; or

2. ☐ the undersigned hereby authorizes the Patent Office to charge the fee in the amount of \$180.00 under 37 C.F.R. §1.17 (p) to Deposit Account 50-3355.

III) ☐ After the period in (I) and (II) but before the payment of the issue fee and,

1. The undersigned hereby states:

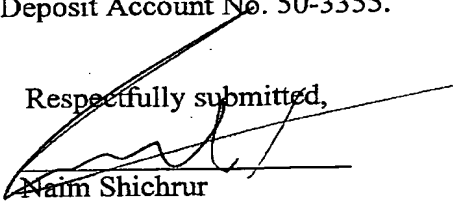
a) ☐ that each item of information cited on the form PTO-1449 was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three (3) months prior to the filing of this Information Disclosure Statement; or

b) ☐ that no items of information contained in Form PTO-1449 was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement; and

2. ☐ The undersigned hereby authorizes the Patent Office to charge the Petition fee in the Amount of \$180.00 under 37 C.F.R. §1.17 (p) to Deposit Account 50-3355.

Except for issue fees payable under 37 C.F.R. §1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-3355.

Respectfully submitted,


Naim Shichrur
Agent for Applicant(s)
Registration No. 56,248

Dated: June 30, 2005

Pearl Cohen Zedek Latzer, LLP
10 Rockefeller Plaza, Suite 1001
New York, New York 10020
Tel: (212) 632-3480
Fax: (212) 632-3490

+

Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
No collection of information unless it displays a valid OMB control number

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/778,818
				Filing Date	February 8, 2001
				First Named Inventor	EDLIS, Ofir
				Group Art Unit	2637
				Examiner Name	GHULAMALI, Q.
				Attorney Docket Number	P-3309-US
Sheet	1	of	1		

[illegible][illegible]

Examiner Signature	Date Considered
-----------------------	--------------------

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**